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PATENT, TRADEMARK, COPYRIGHT
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June 13, 2005

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To: U.S. Patent and Trademark Office
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Enclosures:
- Fax Cover Sheet containing Certificate of Facsimile Transmission (1 page)
- Transmittal containing Certificate of Facsimile Transmission with authorization to charge Deposit Account 23-3000 in the amount of $500.00 for the Filing Fee (2 pages)
- Appeal Brief (24 total pages, including cover sheet, 15 pages Appeal Brief and 8 pages Claims Appendix)

From: Scott A. Stinebruner
Reg. No. 38,323

Re: U.S. Patent Application

Serial No.	09/659,258
Filed:	September 11, 2000
Applicant:	Gregory Richard Hintermeister et al.
Art Unit:	2173
Confirmation No.:	5587
Our Ref:	IBM/155

Pages: 27 (including cover sheet)

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Judith L. Volk — Judith L. Volk

June 13, 2005 — Date

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Judith L Volk — June 13, 2005
Judith L. Volk — Date

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Gregory Richard Hintermeister et al.	Art Unit:	2173
Serial No.	: 09/659,258	Examiner:	Namitha Pillai
Filed	: September 11, 2000		
For	: PICTORIAL-BASED USER INTERFACE MANAGEMENT OF COMPUTER HARDWARE COMPONENTS		

Cincinnati, Ohio 45202

June 13, 2005

Mail Stop Appeal Brief - Patents
Commissioner for Patents
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TRANSMITTAL OF APPEAL BRIEF (PATENT APPLICATION-37CFR 41.37)

1. Transmitted herewith is the APPEAL BRIEF in this application with respect to the Notice of Appeal received by the Office on April 13, 2005.

2. **STATUS OF APPLICANT**

This application is on behalf of

XX **other than a small entity**

____ small entity

___ small entity status is requested

___ small entity status was previously requested and is still proper

3. **FEE FOR FILING APPEAL BRIEF**

Pursuant to 37 CFR 41.20(b)(2) the fee for filing the Appeal Brief is:

____	Small entity	$250.00
XX	**Other than a small entity**	**$500.00**

4. **EXTENSION OF TIME**

Applicant petitions for an extension of time under 37 C.F.R. 1.136(a) for the total number of months checked below:

Months		Fee for other than small entity	Fee for small entity
_____	one month	..... $ 120.00	$ 60.00
_____	two months	..... 450.00	..... 225.00
_____	three months	..... 1,020.00	..... 510.00
_____	four months	..... 1,590.00	..... 795.00
_____	five months	..... 2,160.00	..... 1,080.00

Fee: .... $ _____

If an additional extension of time is required, please consider this a petition therefor.

5. **TOTAL FEE DUE**

The total fee due is:

Appeal Brief Fee $500.00

Extension Fee _____

6. **FEE PAYMENT**

____ Attached is/are check(s) in the sum(s) of $_____ and $_____, respectively.

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7. **FEE DEFICIENCY**

XX Charge any additional extension fee required or credit any overpayment to Deposit Account No. 23-3000.

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Attorney Docket No. IBM/155
Confirmation No. 5587

PATENT

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte Gregory Richard Hintermeister, Bradley James Lory, David Walter Mead, Chee Peh and Steve Royer

Appeal No. _____
Application No. 09/659,258

APPEAL BRIEF

PATENT

IBM/155
Confirmation No. 5587

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Gregory Richard Hintermeister et al. Art Unit: 2173
Serial No.: 09/659,258 Examiner: Namitha Pillai
Filed: September 11, 2000 Atty. Docket No.: IBM/155
For: PICTORIAL-BASED USER INTERFACE MANAGEMENT OF COMPUTER HARDWARE COMPONENTS

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

I. REAL PARTY IN INTEREST

This application is assigned to International Business Machines Corporation, of Armonk, New York.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

III. STATUS OF CLAIMS

Claims 1-43 are pending in the Application, with claims 1, 5, 13, 23, 27, 33, 40 and 42 being once amended. All pending claims stand rejected, and are now on appeal.

IV. STATUS OF AMENDMENTS

No amendments have been filed subsequent to final rejection (Paper No. 10).

V. SUMMARY OF CLAIMED SUBJECT MATTER

Applicants' invention is generally directed to the management of hardware components in a computer system through a graphical user interface. In particular, embodiments of the invention display a pictorial representation of the physical configuration of a plurality of hardware components in a physical computer system. In addition, to facilitate the management of the hardware components, functionality is supported for displaying a selected status for multiple of such hardware components, which may permit, for example, hardware components sharing common attributes or characteristics to be identified in an efficient and intuitive manner. In addition, such a configuration may permit collective management operations to be performed on all selected hardware components, thus facilitating hardware management tasks where multiple components need to be configured in the same manner, and without requiring that each such component be configured via a separate operation.

Fig. 10 of the application (reproduced below), illustrates an exemplary pictorial representation of a physical computer system as might be generated by an embodiment of the invention. In particular, Fig. 10 illustrates the disk units on a multi-user computer such as an AS/400 midrange computer available from International Business Machines Corporation:

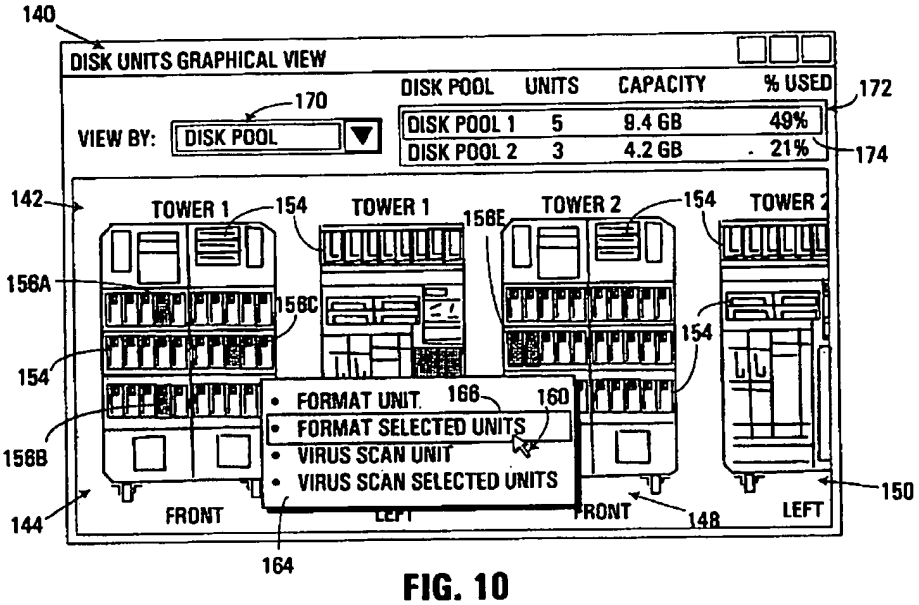

FIG. 10

Fig. 10 illustrates pictorial representations of a pair of towers 1 and 2. It may also be seen that each tower includes a pair of diagrams representing different views of the same tower. For tower 1, diagram 144 represents a front view, while diagram 146 depicts a left side view. Likewise, for tower 2, a diagram 148 displays a front view, while a diagram 150 displays a left side view. A wide variety of hardware components, e.g., disk units, are represented within each diagram at 154 in such a manner that the physical locations of those units within the actual towers are readily ascertainable by technical personnel. (Application, p. 18, ll. 25-28).

As noted above, one important aspect of the invention is the indication of a selected status of multiple hardware components in a pictorial representation. In the case of the system illustrated in Fig. 10, for example, this indication is provided in the form of highlighting, as represented at 156a-156e. (Id.)

The selection of individual hardware components may be performed in response to user input directed to the pictorial representations of those components, e.g., by pointing a mouse at a pictorial representation and clicking a mouse button. Another manner of selecting hardware components, however, is that of selecting all hardware components meeting a particular filter criterion. For example, a user may wish to input a filter or search criterion, e.g., via a dialog box or other user input control, to perform different types of searches on the available hardware components (e.g., select all disk units that are 80GB in size). Also, in addition to the user input of search or filter criterion, a component manager may define one or more predetermined "views" associated with particular filter criterion, e.g., for viewing different types of objects such as disk drives, network adaptors, work station controllers, etc. (Application, p. 17, ll. 11-23).

In addition, where multiple diagrams are supported, functionality may be provided to hide any diagrams not associated with any selected hardware components. By doing so, widely different views may be displayed based upon the context of what information a user is attempting to obtain, offering greater flexibility and reducing the complexity of a pictorial representation in a sophisticated computer system. (Application, p. 16, ll. 3-3, p. 17, ll. 24-30).

Another aspect of the invention relates to performing management operations on multiple hardware components collectively. For example, where multiple hardware are components are selected in the manner described above, a user may be permitted to collectively initiate

management operations on all of the selected components so that the same operations are initiated for all of such components, even if the components are disposed in different computers. (Application, p. 22, l. 25 to p. 23, l. 10).

Furthermore, where multiple hardware components are selected, it may be desirable to generate context-sensitive menus that apply to one or more of the selected hardware components. Fig. 10 above, for example, illustrates a context menu 164 generated as a result of clicking on item 156c with a pointer 160. A variety of available actions may be displayed to a user, e.g., formatting a disk unit, formatting all selected disk units, performing a virus scan operation on the unit or performing a virus scan on all of the selected units, among a wide variety of other component-appropriate actions. (Id.).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Claims 1-6, 8-13, 15-20, 23-28, 30-33, 35-38 and 40-41 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,664,985 to Bormann et al. (hereinafter *Bormann*).

B. Claims 7, 14-15, 21-22, 29, 34, 39 and 42-43 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Bormann* and U.S. Patent No. 5,768,552 to Jacoby (hereinafter *Jacoby*).

VII. ARGUMENT

Applicants respectfully submit that the Examiner's rejections of claims 1-43 are not supported on the record, and should be reversed.

A. Claims 1-6, 8-13, 15-20, 23-28, 30-33, 35-38 and 40-41 were improperly rejected as being anticipated by *Bormann*.

The Examiner argues that *Bormann* anticipates all of claims 1-6, 8-13, 15-20, 23-28, 30-33, 35-38 and 40-41. Anticipation of a claim under 35 U.S.C. §102, however, requires that "each

and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros., Inc. v. Union Oil Co., 2 USPQ2d 1051, 1053 (Fed. Cir. 1987), *quoted in* In re Robertson, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999). Absent express description, anticipation under inherency requires extrinsic evidence that makes it clear that "the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." Continental Can Co. v. Monsanto Co., 20 USPQ2d 1746, 1749 (Fed. Cir. 1991), *quoted in* In re Robertson at 1951. "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." Continental Can at 1749, *quoted in* In re Robertson at 1951.

Applicants respectfully submit that *Bormann* does not disclose the various features recited in claims 1-6, 8-13, 15-20, 23-28, 30-33, 35-38 and 40-41, and as such, the rejections thereof should be reversed. Applicants will hereinafter address the various claims that are the subject of the Examiner's rejection in order.

Independent Claims 1, 23 and 40

The Examiner argues that *Bormann* anticipates claims 1, 23 and 40. Applicants respectfully submit, however, that *Bormann* fails to disclose each and every aspect recited in these claims, and therefore the Examiner's rejection under 35 U.S.C. §102(e) should be reversed. Applicants will discuss method claim 1 prior to discussing claims 23 and 40 (directed respectively to an apparatus and a program product).

In particular, claim 1 generally recites a method of managing computer hardware components. The method includes displaying a pictorial representation on a computer display, where the pictorial representation is associated with a plurality of hardware components and represents a physical configuration of each of the plurality of hardware components, and, in response to user input, indicating a selected status for multiple hardware components from the plurality of hardware components within the pictorial representation associated with the plurality of hardware components.

In rejecting claim 1, the Examiner relies on *Bormann*, and in particular, Fig. 4 and col. 3, lines 21-26, col. 4, lines 27-33, and col. 6, lines 29-37, for allegedly disclosing the indication of a selected status for multiple hardware components on a pictorial representation of a plurality of hardware components. However, it should be noted that Fig. 4 does not disclose a pictorial representation within the context of claim 1. Claim 1 defines a pictorial representation as representing "a physical configuration of each of [a] plurality of hardware components." Fig. 4 of *Bormann*, on the other hand, discloses what is more properly characterized as a block diagram of a plurality of hardware components, as each component is represented as a block, with interconnections between components being represented by lines extending between the blocks. The physical look, as well as the relative physical placement, of individual components in the block diagram of Fig. 4, is not represented.

Applicants describe, for example, at page 10, lines 5-15, that a pictorial representation "pictorially represent[s] the actual physical configuration of hardware components within [an] associated system," and "accurately depicts the relative placement and location of hardware components within a computer." In Fig. 4 of *Bormann*, it would be impossible to determine the physical location and relative placement of most of the components shown in the diagram, including, for example, call processors CP0-CP11, Hubs 0-1, MAA's 0-1, Gateway Nodes 0-1, etc.

Indeed, perhaps the strongest evidence that Fig. 4 of *Bormann* does not disclose a pictorial representation within the context of claim 1 comes from *Bormann* itself, specifically the discussion in the reference of "secondary windows" in connection with Figs. 5-6 (see, e.g., col. 5, line 66 to col. 6, line 37). *Bormann* quite clearly distinguishes the "secondary windows" of Figs. 5-6 from the main window of Fig. 4, noting in connection with the secondary windows that "glyphs representing distributed switch processor components can be arranged to correspond to the physical layout of the components of the distributed switch processor." (col. 6, lines 2-5). Of note, however, there is no discussion in *Bormann* that Fig. 4 is or could be configured in a similar manner to these secondary windows. Thus, Applicants submit that *Bormann* does not disclose that Fig. 4 is a "pictorial representation" as asserted by the Examiner.

In the Final Office Action dated January 13, 2005, the Examiner responds in ¶4 that *Bormann* "points out that Figure 4 serves as a graphical representation of hardware components that are in the system, citing col. 4, lines 27-33. The fact that a representation is "graphical" falls far short of disclosing that a representation shows an actual physical configuration and relative placement and location of those components. Fig. 2 of the instant Application, which shows a block diagram of an apparatus that implements the invention, is quite properly considered to serve as a "graphical representation" of a processor, a memory, user input, a network, a display, and mass storage, however, one of ordinary skill in the art would never consider such a diagram to represent the actual physical configuration of such components.

Claim 1 also recites that the indication of a selected status of multiple selected hardware components occurs in response to user input. The components highlighted in Fig. 4 of *Bormann*, however, are not selected in response to user input, but rather are highlighted to indicate various alarm conditions (see col. 3, lines 21-26, cited by the Examiner, as well as col. 4, line 55 to col 5, line 11). Given that alarms are associated with individual components, it should be evident that the fact that different components are highlighted in Fig. 4 of *Bormann* does not indicate a selected status for those multiple components in response to user input, as required by claim 1.

Furthermore, while the Examiner has not argued as such, the "secondary windows" of Figs. 5 and 6 likewise fail to disclose the indication of a selected status for multiple hardware components in response to user input. In both figures, the multiple instances of highlighting are actually different depictions of the same component (note in Fig. 6 that the highlights are both associated with the component in slot 13). Furthermore, this highlighting is again based upon alarm conditions, which as noted above, are not analogous to a "selected status" in response to user input (see col. 4, line 55 to col 5, line 11).

The Examiner argues in ¶4 of the aforementioned Final Office Action that "Bormann does disclose the use of automated selection of alarms, where certain components are highlighted by the system, but in addition to that Bormann does disclose allowing the user ability to select distinct hardware components." Of note, however, the Examiner never argues, nor could the Examiner argue, that *Bormann* discloses the highlighting of the selected status of multiple (rather than "distinct") hardware components in response to user input.

The Examiner also cites col. 6, lines 28-36 in the same paragraph of the aforementioned Final Office Action, arguing that user input is used to choose hardware components, and that *Bormann* discloses how multiple components have been selected by the user. The passage relied upon by the Examiner, however, merely discloses that a secondary window corresponding to a particular switch processor can be concurrently viewed with other windows, such as that of another switch processor.

Apparently, the Examiner argues that the display of a secondary window corresponds to "selection" of a component, and that the secondary windows represent indications of "selected status". Applicants respectfully submit, however, that the opening of a secondary window does not correspond to "indicating a selected status for multiple hardware components . . . within [a] pictorial representation," as required by claim 1. The secondary windows are separate from the diagram used to initiate the selection of a component (e.g., Fig. 4), so there is no indication of a selected status within that diagram. Moreover, as noted above, the diagram at issue is not a pictorial representation, but rather a block diagram that fails to display the relative placement and location of hardware components. Thus, Applicants submit that the opening of secondary windows in *Bormann* fails to disclose the indication of a selected status for multiple hardware components in response to user input and within a pictorial representation, as required by claim 1.

The Examiner has therefore failed to establish anticipation of claim 1 by *Bormann*. The rejection of claim 1 should therefore be reversed.

Moreover, Applicants respectfully submit that claim 1 is also non-obvious over *Bormann* as there is no suggestion in the reference, or elsewhere in the prior art, of the desirability of providing the ability for a user to select multiple hardware components and have the selected status of such components displayed on a pictorial representation.

A *prima facie* showing of obviousness requires that the Examiner establish that the differences between a claimed invention and the prior art "are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." 35 U.S.C. §103(a). Such a showing requires that all claimed features be disclosed or suggested by the prior art, along with objective evidence of the suggestion, teaching

or motivation to combine or modify prior art references, as "[c]ombining prior art references without evidence of such a suggestion, teaching or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability -- the essence of hindsight." In re Dembiczak, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

In the case of claim 1, the Examiner has provided no evidence of a motivation in the art to modify *Bormann* to support the indication of the selected status of multiple hardware components in a pictorial representation, where such indication is performed in response to user input. Applicants therefore respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness. An indication of the allowability of claim 1 is therefore respectfully requested.

Next, with respect to independent claims 23 and 40, which respectively recite an apparatus and a program product, each of these claims likewise recite the indication, in response to user input, of a selected status for multiple hardware components in a pictorial representation. Accordingly, Applicants respectfully submit that claims 23 and 40 are novel and non-obvious over *Bormann* and the other prior art of record for the same reasons as claim 1. Reversal of the Examiner's rejections, and allowance of claims 23 and 40, are therefore respectfully requested.

Claims 2-4 and 24-26

Claims 2-4 and 24-26 are not separately argued.

Claims 5 and 27

Claims 5 and 27 respectively depend from claims 1 and 23, and each recites comparing attributes associated with a plurality of hardware components against a filter criterion, and selecting those hardware components associated with attributes that match the filter criterion. Of note, each claims also recites that the pictorial representation continues to depict at least one non-selected hardware component after such selection.

In rejecting these claims, the Examiner relies on *Bormann*, column 4, lines 40-45 and column 6, lines 29-37. Specifically, the Examiner argues that double clicking a component to open a secondary window in *Bormann* (as described at col. 4, lines 40-45) is analogous to

selecting a filter criterion and selecting those hardware components having attributes matching that criterion. It is apparently the Examiner's position that opening a secondary window for a particular component, which results in the display of sub-components of that component, operates much the same as a filter criterion.

Applicants' claimed filter criterion, on the other hand, displays within a pictorial representation both components that meet a filter criterion and components that do not meet the criterion, with highlighting used to indicate which of those components meet the criterion. If the Examiner considers the main window of Fig. 4 to correspond to a pictorial representation, however, the opening of secondary windows does not display selected components that meet the filter criterion within the pictorial representation, as noted above in connection with claims 1, 23 and 40. On the other hand, if the Examiner considers the secondary windows of Figs. 5 and 6 to correspond to pictorial representations, there is no disclosure in *Bormann* indicating that a filter criterion, much less user selection of multiple hardware components, can occur within a secondary window.

Accordingly, Applicants respectfully submit that the Examiner has failed to establish anticipation of claims 5 and 27 by *Bormann*. Reversal of the Examiner's rejections, and allowance of the claims, are therefore respectfully requested.

Claims 8-10 and 30

Claims 8-10 and 30 are not separately argued.

Claims 11 and 31

Claims 11 and 31 each recite visually highlighting those portions of the pictorial representation that depict the physical configurations of multiple hardware components that have a selected status. In rejecting these claims, the Examiner relies on col. 3, lines 21-26 of *Bormann*, which focuses merely on displaying alarm status. As Applicants noted in connection with claims 1, 23 and 40, however, the displaying of an alarm status falls short of disclosing display of selected status in response to user input. Furthermore, if the Examiner takes the position that opening a secondary window that displays subcomponents of a component that is

displayed in a main window corresponds to indicating a selected status, it should be noted that the secondary windows could not be considered to be visual highlights of portions of a pictorial representation that depict the physical configurations of hardware components.

Accordingly, Applicants respectfully submit that the Examiner has failed to establish anticipation of claims 11 and 31 by *Bormann*. Reversal of the Examiner's rejections, and allowance of the claims, are therefore respectfully requested.

Claims 12 and 32

Claims 12 and 32 are not separately argued.

Claims 13 and 33

Claims 13 and 33 additionally recite the concept of performing a management operation on all of the multiple hardware components that have the selected status responsive to user input. As such, in the invention recited in these claims, a user is able to perform a given operation on multiple hardware components in a collective manner, as opposed to having to separately perform such an operation individually on each component.

The Examiner relies on column 6, lines 28-35 of *Bormann* in rejecting these claims. The cited passage, however, merely discloses that a user may open multiple secondary windows, and that the user "can view, via the multiple windows, all the information needed to perform maintenance tasks on the distributed switch and/or a distributed switch processor." This passage, however, says nothing about performing a management operation on multiple selected hardware components. At most, the passage suggests that, with the information displayed about multiple components, a user can perform maintenance tasks on those components. Nothing in the passage, however, suggests that those tasks could be performed collectively on multiple components at once, or even that maintenance tasks can even be initiated via the secondary windows.

One significant benefit of the claimed feature is the ability to select multiple hardware components and then perform collective management operations on those components, which

provides administrators with significantly greater flexibility for managing hardware components, and can significantly reduce the amount of effort required compared to performing these operations separately for individual components. For example, as shown in Fig. 10 of the Application (reproduced above), an administrator might be permitted to select multiple disk drives from a pictorial representation and then, through a common operation, format all of those units in a single operation. *Bormann* discloses no functionality that is even arguably analogous to this claimed feature of claims 13 and 33.

Applicants therefore respectfully submit that claims 13 and 33 are not disclosed or suggested by *Bormann*, and the Examiner's rejection cannot be sustained. Reversal of the Examiner's rejections of claims 13 and 33, and allowance of these claims, are therefore respectfully requested.

Claims 16-20, 33, 35-38 and 40-41

Claims 16-20, 33, 35-38 and 40-41 are not separately argued.

B. Claims 7, 14-15, 21-22, 29, 34, 39 and 42-43 were improperly rejected as being unpatentable over *Bormann* and *Jacoby*.

Claims 7 and 29

Claims 7 and 29 additionally recite the concept of selecting a filter criterion from a plurality of predetermined filter criteria with each filter criterion associated with a predetermined view among a plurality of views. As described, for example, at page 17 of the Application, by providing multiple filter criteria, different views may be defined to view different types of components, e.g., disk drives, network adapters, work station controllers, etc.

In rejecting these claims, the Examiner relies on *Bormann* and *Jacoby*. The Examiner admits that *Bormann* does not disclose the claimed concept; however, the Examiner relies on the scroll bars of *Jacoby* (Figs. 4-5 and the accompanying text at col. 8, lines 6-37), arguing that manipulation of a network topology viewing window to display different components operates as a filter criterion.

However, as noted above in connection with claims 5 and 27 (from which claims 7 and 29 depend), the application of a filter criterion as recited in claims 5 and 27 requires that the pictorial representation continue to depict at least one non-selected hardware component. By the Examiner's own logic, where zooming and/or scrolling through a network topology operates as a view with an associated filter criteria, the zooming and scrolling features supported by *Jacoby* by necessity display only those components that meet the criterion. Thus, *Jacoby* fails to disclose or suggest a view and associated filter criterion where at least one non-selected hardware component is also displayed.

As such, Applicants respectfully submit that *Jacoby* fails to motivate one of ordinary skill in the art to modify *Bormann* to incorporate multiple views with associated filter criteria, where at least one non-selected hardware component is depicted in a pictorial representation after application of a filter criterion. Claims 7 and 29 are therefore non-obvious over the prior art of record. Reversal of the Examiner's rejections, and allowance of these claims, are therefore respectfully requested.

Claims 14-15, 21-22, 34 and 39

Claims 14-15, 21-22, 34 and 39 are not separately argued.

Claim 42

Claim 42 recites a method of managing computer hardware components, which includes accessing a plurality of computers to identify a plurality of hardware components resident in the plurality of computers, dynamically generating a pictorial representation on a computer display, where the pictorial representation is associated with the plurality of computers and represents a physical configuration of each of the plurality of hardware components within the plurality of computers, and performing at least one management operation on multiple selected hardware components among the plurality of hardware components in response to user input directed to that portion of the pictorial representation that represents the physical configuration of one of the multiple selected hardware components.

Thus, claim 42 is principally directed to the concept of performing at least one management operation on multiple selected hardware components in response to user input directed to a portion of a pictorial representation that represents the physical configuration of one of the multiple selected hardware components.

The Examiner relies on *Bormann*, and in particular, col. 6, lines 28-36, for allegedly disclosing the performance of a management operation on multiple selected hardware components in response to user input directed to a representation of one of such components in a pictorial representation. As discussed above in connection with claims 13 and 33, this cited passage merely discloses that multiple windows can be concurrently viewed by an operator, and that an operator can perform multiple maintenance tasks. Contrary to the Examiner's assertion, the cited passage does not disclose performing a management operation on multiple selected hardware components, much less the performance of such an operation in response to user input directed to a depiction of one of such selected hardware components. Put another way, there is nothing in *Bormann* that discloses the performance of a single management operation that affects multiple components. Likewise, there is nothing in *Bormann* that discloses a management operation that affects multiple components in response to user input directed to a depiction of one of such components.

Jacoby, which is cited by the Examiner merely to support the notion of distributing components among multiple computers, does not add anything to the rejection. In particular, *Jacoby* does not disclose the performance of a management operation on multiple hardware components in response to user input directed to a depiction of one of such components in a pictorial representation.

The Examiner has presented no objective evidence of a motivation in the art to modify *Bormann* to incorporate support for a management operation that affects multiple selected hardware components. Accordingly, Applicants respectfully submit that claim 42 is non-obvious over the combination of *Bormann* and *Jacoby*. Reversal of the Examiner's rejection of claim 42, and allowance of the claim, are therefore respectfully requested.

Claim 43

Claim 43 is not separately argued.

VIII. CONCLUSION

In conclusion, Applicants respectfully request that the Board reverse the Examiner's rejections of claims 1-43, and that the Application be passed to issue. If there are any questions regarding the foregoing, please contact the undersigned at 513/241-2324. Moreover, if any other charges or credits are necessary to complete this communication, please apply them to Deposit Account 23-3000.

Respectfully submitted,

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Date: 6/13/05

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IX. CLAIMS APPENDIX: CLAIMS ON APPEAL (S/N 09/659,258)

1. (Amended) A method of managing computer hardware components, the method comprising:

(a) displaying a pictorial representation on a computer display, the pictorial representation associated with a plurality of hardware components and representing a physical configuration of each of the plurality of hardware components; and

(b) in response to user input, indicating a selected status for multiple hardware components from the plurality of hardware components within the pictorial representation associated with the plurality of hardware components.

2. (Original) The method of claim 1, wherein the pictorial representation includes a diagram of at least one enclosure within which the plurality of hardware components is disposed, the diagram further depicting a physical location of each of the plurality of hardware components in the enclosure.

3. (Original) The method of claim 2, wherein the first diagram depicts a first view of the enclosure taken from a first viewpoint, and wherein the pictorial representation further includes a second diagram depicting a second view of the enclosure taken from a second viewpoint.

4. (Original) The method of claim 2, wherein at least one of the plurality of hardware components comprises an unused interface component configured to physically interconnect with another hardware component, the method further comprising managing the unused interface component through user input directed to the pictorial representation.

5. (Amended) The method of claim 1, wherein each of the plurality of hardware components is associated with at least one attribute, the method further comprising:

(a) comparing attributes associated with the plurality of hardware components against a filter criterion; and

(b) selecting those hardware components associated with attributes that match the filter criterion, wherein the pictorial representation continues to depict at least one non-selected hardware component after such selection.

6. (Original) The method of claim 5, further comprising generating the filter criterion responsive to user input.

7. (Original) The method of claim 5, further comprising selecting the filter criterion from a plurality of predetermined filter criteria, each of the plurality of predetermined filter criteria associated with a predetermined view among a plurality of views.

8. (Original) The method of claim 5, wherein each hardware component is associated with a hardware type, and wherein the filter criterion identifies a selected hardware type, wherein selecting those hardware components includes selecting those hardware components associated with the selected hardware type.

9. (Original) The method of claim 5, further comprising updating the indication of the selected status for at least one of the multiple hardware components responsive to selection of those hardware components associated with attributes that match the filter criterion.

10. (Original) The method of claim 5, wherein each of the plurality of hardware components is associated with at least one of a plurality of diagrams, each of which depicting a physical location of at least one of the plurality of hardware components, the method further comprising displaying within the pictorial representation only those diagrams from the plurality of diagrams that depict the physical location of at least one hardware component having a selected status.

11. (Original) The method of claim 1, further comprising visually highlighting those portions of the pictorial representation that depict the physical configurations of the multiple hardware components that have a selected status.

12. (Original) The method of claim 1, further comprising updating the status of a first hardware component among the plurality of hardware components to one of a selected and an unselected status responsive to user input directed to that portion of the pictorial representation that depicts the physical configuration of the first hardware component.

13. (Amended) The method of claim 1, further comprising performing a management operation on all of the multiple hardware components that have a selected status responsive to user input.

14. (Original) The method of claim 13, wherein the multiple hardware components are physically located in a plurality of computers, wherein performing the management operation includes performing the management operation in each of the plurality of computers.

15. (Original) The method of claim 14, wherein at least two of the plurality of computers utilize different types of computer platforms.

16. (Original) The method of claim 1, further comprising retrieving a list of available management operations associated with a first hardware component among the plurality of hardware components in response to user input directed to that portion of the pictorial representation that depicts the physical configuration of the first hardware component.

17. (Original) The method of claim 16, wherein the user input includes user input to open a context sensitive menu, the method further comprising:

(a) displaying the list of available management operations within a context sensitive menu; and

(b) initiating one of the available management operations on the first hardware component responsive to user input directed to the context sensitive menu.

18. (Original) The method of claim 1, further comprising retrieving status information associated with a first hardware component among the plurality of hardware components in

response to user input directed to that portion of the pictorial representation that depicts the physical configuration of the first hardware component.

19. (Original) The method of claim 18, wherein the user input includes locating a user-manipulated pointer over that portion of the pictorial representation that depicts the physical configuration of the first hardware component, the method further comprising displaying the retrieved status information within a pop-up window disposed proximate that portion of the pictorial representation that depicts the physical configuration of the first hardware component.

20. (Original) The method of claim 1, wherein displaying the pictorial representation and indicating the selected status are performed on a first computer, and wherein each of the plurality of hardware components is physically located in the first computer.

21. (Original) The method of claim 1, wherein displaying the pictorial representation and indicating the selected status are performed on a first computer, and wherein at least a portion of the plurality of hardware components are physically located in a second computer in communication with the first computer.

22. (Original) The method of claim 1, wherein each of the plurality of hardware components is disposed in a computer selected from the group consisting of a single-user computer, a multi-user computer, a clustered computer, a multi-unit computer, and combinations thereof.

23. (Amended) An apparatus, comprising:

(a) a memory; and

(b) a program resident in the memory and configured to display a pictorial representation on a computer display, the pictorial representation associated with a plurality of hardware components and representing a physical configuration of each of the plurality of hardware components, the program further configured to indicate, in response to user input, a selected status for multiple hardware components from the plurality of

hardware components within the pictorial representation associated with the plurality of hardware components.

24. (Original) The apparatus of claim 23, wherein the pictorial representation includes a diagram of at least one enclosure within which the plurality of hardware components is disposed, the diagram further depicting a physical location of each of the plurality of hardware components in the enclosure.

25. (Original) The apparatus of claim 24, wherein the first diagram depicts a first view of the enclosure taken from a first viewpoint, and wherein the pictorial representation further includes a second diagram depicting a second view of the enclosure taken from a second viewpoint.

26. (Original) The apparatus of claim 24, wherein at least one of the plurality of hardware components comprises an unused interface component configured to physically interconnect with another hardware component, wherein the program is further configured to manage the unused interface component through user input directed to the pictorial representation.

27. (Amended) The apparatus of claim 23, wherein each of the plurality of hardware components is associated with at least one attribute, and wherein the program is further configured to compare attributes associated with the plurality of hardware components against a filter criterion, and select those hardware components associated with attributes that match the filter criterion, wherein the program is configured to display the pictorial representation depicting at least one non-selected hardware component after such selection.

28. (Original) The apparatus of claim 27, wherein the program is further configured to generate the filter criterion responsive to user input.

29. (Original) The apparatus of claim 27, wherein the program is further configured to select the filter criterion from a plurality of predetermined filter criteria, each of the plurality of predetermined filter criteria associated with a predetermined view among a plurality of views.

30. (Original) The apparatus of claim 27, wherein each of the plurality of hardware components is associated with at least one of a plurality of diagrams, each of which depicting a physical location of at least one of the plurality of hardware components, wherein the program is further configured to display within the pictorial representation only those diagrams from the plurality of diagrams that depict the physical location of at least one hardware component having a selected status.

31. (Original) The apparatus of claim 23, wherein the program is further configured to visually highlight those portions of the pictorial representation that depict the physical configurations of the multiple hardware components that have a selected status.

32. (Original) The apparatus of claim 23, wherein the program is further configured to update the status of a first hardware component among the plurality of hardware components to one of a selected and an unselected status responsive to user input directed to that portion of the pictorial representation that depicts the physical configuration of the first hardware component.

33. (Amended) The apparatus of claim 23, wherein the program is further configured to perform a management operation on all of the multiple hardware components that have a selected status responsive to user input.

34. (Original) The apparatus of claim 33, wherein the multiple hardware components are physically located in a plurality of computers, wherein the program is further configured to perform the management operation by performing the management operation in each of the plurality of computers.

35. (Original) The apparatus of claim 23, wherein the program is further configured to retrieve a list of available management operations associated with a first hardware component among the plurality of hardware components in response to user input directed to that portion of the pictorial representation that depicts the physical configuration of the first hardware component.

36. (Original) The apparatus of claim 35, wherein the user input includes user input to open a context sensitive menu, wherein the program is further configured to display the list of available management operations within a context sensitive menu, and initiate one of the available management operations on the first hardware component responsive to user input directed to the context sensitive menu.

37. (Original) The apparatus of claim 23, wherein the program is further configured to retrieve status information associated with a first hardware component among the plurality of hardware components in response to user input directed to that portion of the pictorial representation that depicts the physical configuration of the first hardware component.

38. (Original) The apparatus of claim 23, wherein the program is resident on the same computer as the plurality of hardware components.

39. (Original) The apparatus of claim 23, wherein at least one of the plurality of hardware components is physically located on a different computer from that within which the program is resident.

40. (Amended) A program product, comprising:

(a) a program configured to display a pictorial representation on a computer display, the pictorial representation associated with a plurality of hardware components and representing a physical configuration of each of the plurality of hardware components, the program further configured to indicate, in response to user input, a selected status for multiple hardware components from the plurality of hardware

components within the pictorial representation associated with the plurality of hardware components; and

(b) a signal bearing medium bearing the program.

41. (Original) The program product of claim 40, wherein the signal bearing medium includes at least one of a recordable medium and a transmission medium.

42. (Amended) A method of managing computer hardware components, the method comprising:

(a) accessing a plurality of computers to identify a plurality of hardware components resident in the plurality of computers;

(b) dynamically generating a pictorial representation on a computer display, the pictorial representation associated with the plurality of computers and representing a physical configuration of each of the plurality of hardware components within the plurality of computers; and

(c) performing at least one management operation on multiple selected hardware components among the plurality of hardware components in response to user input directed to that portion of the pictorial representation that represents the physical configuration of one of the multiple selected hardware components.

43. (Original) The method of claim 42, wherein each of the plurality of hardware components is associated with at least one attribute, and wherein each of the plurality of hardware components is associated with at least one of a plurality of diagrams, the method further comprising:

(a) comparing attributes associated with the plurality of hardware components against a filter criterion; and

(b) selecting those hardware components associated with attributes that match the filter criterion;

wherein dynamically generating the pictorial representation includes displaying within the pictorial representation only those diagrams associated with the selected hardware components.